

## CLAIMS

1. Method of executing a measurement or control action, wherein a temporally periodic synchronization signal (S, S') generated by a receiver (9) based on a timing reference signal (Z) is divided by a switching frequency (F) generated by a timing generator (14) into a plurality of switching intervals ( $I_n$ ), wherein a switching command ( $C_n$ ) is associated to each switching interval ( $I_n$ ), with switching command ( $C_n$ ) triggering an associated switching process of the action.
2. Method according to claim 1, characterized in that the receiver (9) comprises a GPS receiver, and that the PPS signal outputted by the receiver (9) is used as the synchronization signal (S, S').
3. Method according to claim 1 or 2, characterized in that the timing generator (14) comprises a quartz oscillator.
4. Method according to one of the claims 1 to 3, characterized in that the synchronization signal (S) is continuously corrected by a correction value (K).
5. Method for synchronizing several measurement and/or control actions, with each measurement or control action being executed by a method according to one of the claims 1 to 4 based on a common timing reference signal (Z).
6. Method according to claim 5, characterized in that the GPS signal is used as the timing reference signal (Z).
7. Controller (7) for carrying out the method according to one of the claims 1 to 4, comprising a receiver (9) configured to generate a temporally periodic synchronization signal (S, S') based on a timing reference signal (Z), a timing

generator (14) configured to generate a switching frequency (F), and a pulse divider (13) configured to divide the synchronization signal (S, S') into a plurality of switching intervals ( $I_n$ ) based on the switching frequency (F), to associate a switching command ( $C_n$ ) to each switching interval ( $I_n$ ), and to output the switching command ( $C_n$ ) to a device (8) for triggering a corresponding switching process and executing the action.

8. Controller (7) according to claim 7, characterized in that a sequence of switching commands ( $C_n$ ) is supplied to the pulse divider (13) by stored program control.